

To ship Feb 25

Work Order ID 141937

141937

Page 1

Item ID: D4888-1L02

Accept

N9000040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Dome Light Housing, Black

Start Date: 2/22/2016 Start Qty: 2.00

0 4
0 4

Cust Item ID:

Required Date: 2/24/2016 Req'd Qty: 2.00

Customer:

Reference:

Approvals:

Process Plan: SH

Date: 20160222 Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4888

A

100

0.00

100

HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Cut Sheet to required Blank size

DAS

07

9-89

16/07/23

105

0.00

105

HandThermo

Dry Material

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

Temp: 245 deg. F

Time IN: 5:00 PM

Time OUT: 6:00 AM

DAS

07

9-89

16/03/23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

February 22, 2016 3:44:05 PM

Page 2

1-Trim to finished dimensions as per Dwg

07
9-89

16/02/23

DAS
07
9-89

16/02/23

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval	
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Page 3

February 22, 2016 3:44:05 PM

Reference:

Run	Start	*NR1*
	Stop	*NR2*

[illegible]

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____							
Misidentified ☐	Past Due ☐								

Work Order ID 141937

February 22, 2016 3:44:05 PM

141937

Page 4

Item ID: D4888-1L02

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Dome Light Housing, Black

Start Date: 2/22/2016 Start Qty: 2.00

2

Cust Item ID:

Required Date: 2/24/2016 Req'd Qty: 2.00

2

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

180

QC21- Final Inspection - Work Order Release

0.00

180

QC

Memo

0.00

Quality Control

MLJ FEB 24 2016MLJ FEB 24 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

Picklist Print

February 22, 2016 3:44:10 PM

Page 1

Work Order ID: 141937

141937

Parent Item: D4888-1L02

D4888-11 02

Parent Item Name: Dome Light Housing, Black

Start Date: 2/22/2016

Required Date: 2/24/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP Rev. A New Issue 13/09/12 DL

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MLEXS.093-F6006-02		Purchased	No			100	sf	951.5434	1.77	3.726316			07 9-89
MI FXS 093-F6006-02									**				
GE PLASTICS LEXAN SHEET													

Location

Loc Qty

Loc Code

therm

951.54337

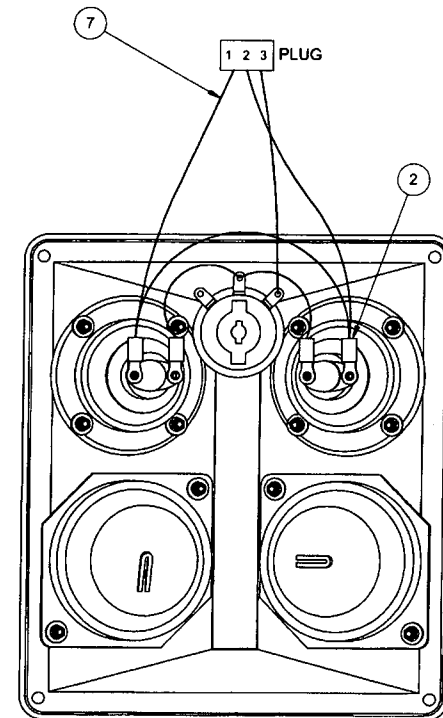
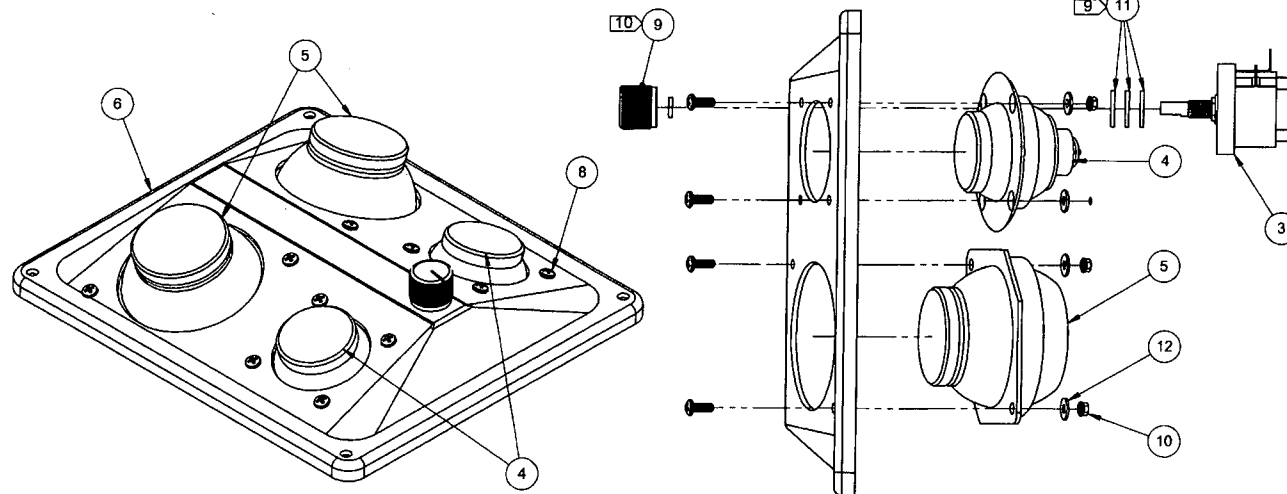
m127208

951.54337

0.25 = 1 ft.

16/02/73

ITEM NO.	QTY. -041	PART NUMBER	DESCRIPTION
1	X	D4888-041	DOMELIGHT AIR VENT ASSEMBLY
2	4	D4290-21 (REF)	RING TERMINAL (PART OF D4897-041)
3	1	D4864-1 (REF)	RHEOSTAT (PART OF D4897-041)
4	2	D4872-1 (REF)	LIGHT FIXTURE (PART OF D4897-041)
5	2	D4886-1	AIR VENT
6	1	D4888-1	DOMELIGHT HOUSING
7	1	D4897-041	DOMELIGHT WIRING HARNESS
8	12	D4898-1	SCREW
9	1	D4906-1	KNOB
10	12	MS21042L06	NUT
11	3	NAS1149F0663P	WASHER
12	12	NAS1149FN632P	WASHER



D4888-041 DOME LIGHT AIR VENT ASSEMBLY

NOTES:

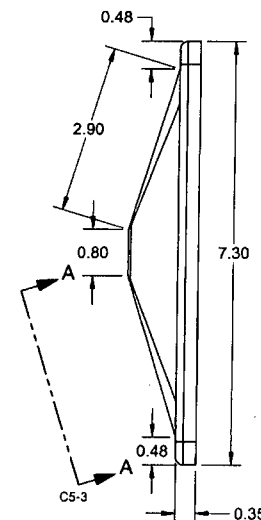
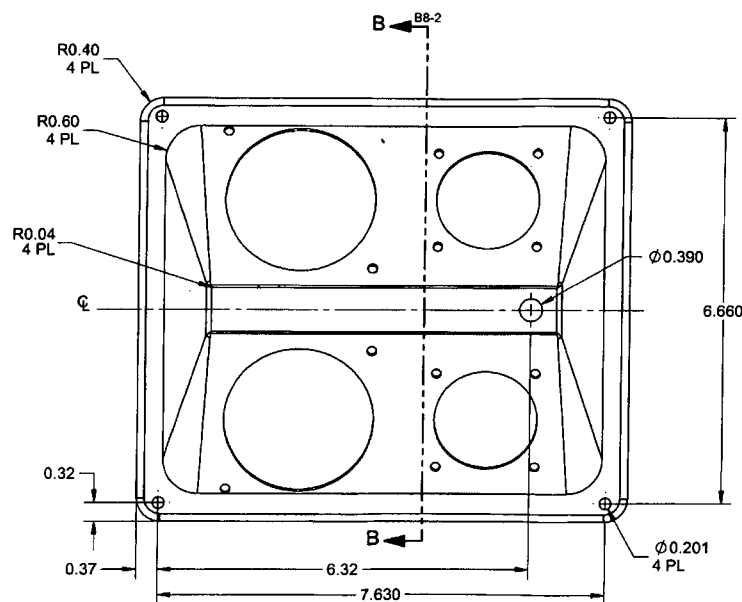
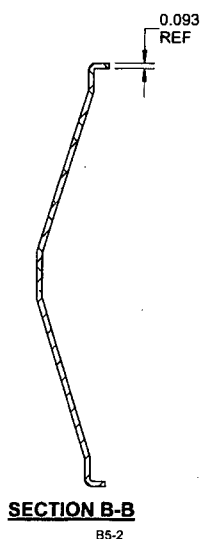
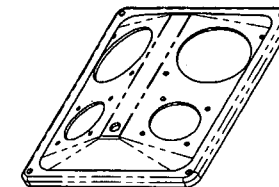
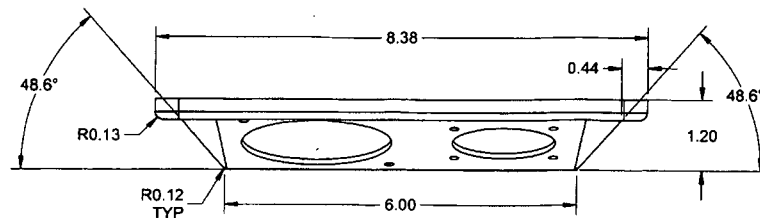
- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 1.43 lbs
- 8) REPLACES GENEVA P/N GA129-12 P112-L
- 9) OPTIONAL: USE ADDITIONAL WASHERS TO SHIM AS REQUIRED
- 10) NUT INCLUDED WITH RHEOSTAT

20160222
SW 141937

RELEASED
2013-09-16

REV.	NEW ISSUE	DESCRIPTION	BY	DATE
DESIGN	OS			13.07.11
DRAWN	DC			
CHECKED	DC			
MFG. APPR.	DC			
APPROVED	DC			
DE APPR.	DC			
DATE	13.07.11			

DART AEROSPACE USA, INC. KENT, WA		REV. A
DRAWING NO. D4888	SHEET 1 OF 3	
TITLE DOME LIGHT AIR VENT ASSY	SCALE NTS	
COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PROPRIETARY AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.		



- NOTES:
- 1) MATERIAL: SEE TABLE
 - 2) TOOLING: THERMOFORM PER MOLD DT9932 PER QSI 022 TRIM PER DT9932
 - 3) FINISH: N/A
 - 4) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 5) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 6) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 7) IDENTIFICATION: N/A
 - 8) WEIGHT: 0.22 lbs
 - 9) REPLACES GENEVA P/N GA129-7
 - 10) PART SHAPE AND GEOMETRY IS CONTROLLED BY TOOLING
 - 11) MINIMUM THICKNESS AFTER FORMING IS 0.060" FOR FLANGES AND 0.070" ELSEWHERE

D4888-1 DOME LIGHT HOUSING

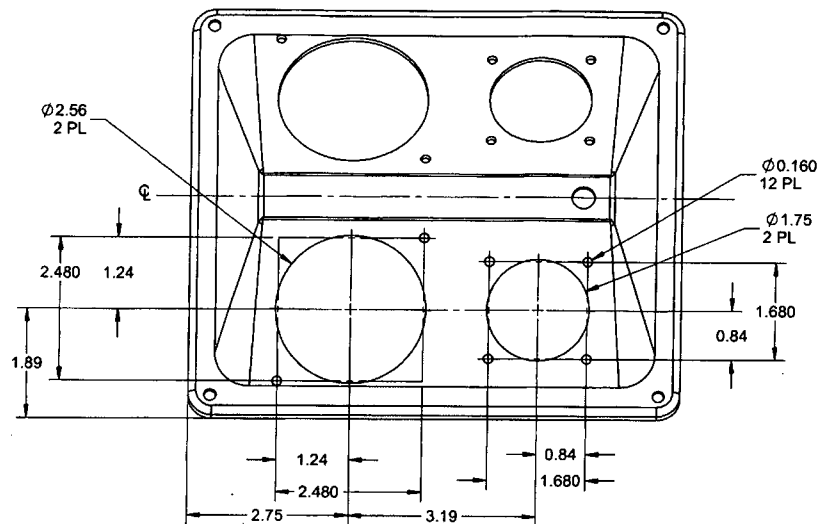
PART NUMBER	DESCRIPTION
D4888-1LBL	F6006 SUEDE/POLISHED 701 BLACK LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-02)
D4888-1LLG	F6006 SUEDE/POLISHED GY5B133 LIGHT GREY LEXAN SHEET 0.093 THICK (REF DART SPEC MLEXS.093-F6006-07)

DESIGN	OS
DRAWN	OS
CHECKED	DC
MFG. APPR.	HC
APPROVED	AB
DE APPR.	CH
DATE	13.07.11

DART AEROSPACE USA, INC.
KENT, WA

DRAWING NO.	REV. A
D4888	SHEET 2 OF 3
TITLE	SCALE
DOME LIGHT AIR VENT ASSY	NTS
COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

RELEASED
2013-09-16



VIEW A-A
B2-2

RELEASED
2013-09-16
WJ

DESIGN	<i>OS</i>	DART AEROSPACE USA, INC.	
DRAWN	<i>OS</i>	KENT, WA	
CHECKED	<i>PL</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>PL</i>	D4888	SHEET 3 OF 3
APPROVED	<i>PL</i>	TITLE	SCALE
DE APPR.	<i>PL</i>	DOMELIGHT AIR VENT ASSY	NTS
DATE	13.07.11	COPYRIGHT © 2013 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL. IT IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

DART AEROSPACE LTD		Work Order: 141937
Description:		Part Number:
Inspection Dwg:	Rev:	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST
THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than <u>N/A</u>				
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by: <u>DAS</u> <u>07</u>	Date: <u>16/02/23</u>
--------------------------------------	-----------------------

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
8.38"	± 0.030	8.391"	✓			
7.30"	± 0.030	7.30"	✓			
Ø 0.390"		Ø 0.390"	✓			
Ø 2.56"		2.55"	✓			
Ø 1.75"		1.78"	✓			
Ø 0.160"		0.161"	✓			
Ø 0.201"		0.201"	✓			

Measured by: <u>DAS</u> <u>07</u>	Date: <u>16/02/23</u>
--------------------------------------	-----------------------

Audited by: <u>DAS</u> <u>38</u>	Date: <u>FEB 25 2016</u>
-------------------------------------	--------------------------

Preliminary Approval: <u>9-89</u>	Date:
-----------------------------------	-------

Rev	Date	Change	Revised by	Approved
B	10.04.14	Added preliminary approval	KJ	